

USSN 10/647,347  
Docket No.: 2328-050A

### REMARKS

To expedite prosecution, claims 26-29 and 31 have been canceled and rewritten as claim 32 and claim 30 has been amended to depend on claim 32. Entry of the amendment is in order because the Examiner has previously considered all issues raised by claims 30 and 32.

Applicants traverse the previous rejection of claim 29 under 35 USC §103(a) as being unpatentable over Holland et al. (U.S. Patent 5,759,280) in view of Tobin et al. (U.S. Patent 5,619,103) as applied to claims 28 and 30, and further in view of Savas (U.S. Patent 5,983,828). Holland et al. does not disclose plural parallel connected windings as alleged in the Office Action. Column 6, line 63-column 7, line 3 of Holland et al. states the full and half turns of loops 40, 42, 44, 46 and 48 are connected in series with each other. Hence, the statement in the last paragraph on page 2 of the Office Action that elements 42, 44, 46 and 48 are plural parallel connected windings is contrary to the specific language of Holland et al. An inspection of Fig. 2A of Holland et al. and the description thereof indicate loops 40, 42, 44, 46 and 48 are connected in series with each other because the current flowing in lead 56 flows to lead 58 via a series connected path that extends from loop 40 through strap 64 then through loop 48; then to loop 46, via strap 72; from loop 46 to loop 44 via strap 78; from loop 44 to loop 42 via strap 82; and from loop 42 to lead 58. Because of the foregoing incorrect statement about Holland et al., the rejection of claim 29 based on Holland et al., Tobin et al. and Savas et al. was incorrect. Because claim 32 includes the limitations of canceled claim 29, claim 32 is patentable over Holland et al., Tobin et al. and Savas et al.

USSN 10/647,347  
Docket No.: 2328-050A

Applicants traverse the rejection of claim 29 under 35 USC §103(a) as being unpatentable over Ishii et al. (U.S. Patent 5,795,429) in view of Tobin et al., as applied to claims 28 and 30, and further in view of Savas. The Office Action relies on Savas to disclose an apparatus with different processors 102a, 102b that operate independently. The Office Action states that, in view of this disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the proposed combination of Ishii et al. modified by Tobin et al. so as to use the Savas process on a plurality of different processors because in such a way each processor can have its plasma distribution adjusted based upon the particular process being conducted in the processor. However, the Office Action does not properly consider the Savas reference.

Savas discloses an etcher wherein two substrates 107a and 107b are located in the same chamber and are subjected to the same vacuum. Workpiece 107a is beneath a plasma source excited by cylindrical coil 124a, in turn responsive to source 150a. Workpiece 107b is excited by a plasma resulting from excitation by cylindrical coil 124b, in turn responsive to source 150b. The two substrates sit on a common holder 112, connected to source 152. The Savas etcher, wherein a single chamber is used for processing two workpieces simultaneously, is so different from the chambers of Ishii et al. and Tobin et al. that one of ordinary skill in the art would not have combined them. Further, there is nothing in Savas disclosing the admittedly missing step of different processors of the same type having differing azimuthal electric field and plasma density distributions from processor to processor, wherein the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular

USSN 10/647,347  
Docket No.: 2328-050A

processor until tests indicate optimum uniform plasma distribution is achieved in each processor.

In addition, Applicants do not agree with the allegation in the Office Action regarding claim 27, that Ishii et al. discloses turning the exterior winding 24a and another winding of the coil 24b relative to each other about a central axis. The Office Action says to see Fig. 9 and its description in this regard. Certainly Fig. 9, *per se*, does not disclose the turning step. The descriptions of Fig. 9 at col. 4, liens 17-22 and col. 10, liens 28-46 (the only apparent references to Fig. 9) do not mention the foregoing "turning" limitation. Consequently, the former rejection of claim 29 based on Ishii et al., Tobin et al. and Savas is incorrect, and claim 32, that includes the foregoing integers, is allowable.

Applicants traverse the rejection of claim 29 under 35 USC §103(a) as being unpatentable over Chen et al. (U.S. Patent 6,164,241) in view of Tobin et al. as applied to claims 28 and 30 above, and further in view of Savas. Applicants cannot agree with this rejection for the same reasons set forth above regarding Savas. Therefore, it would not have been obvious to one of ordinary skill in the art at the time the invention was made to modify the process of Chen et al. modified by Tobin et al. so as to use this process on a plurality of different processors as disclosed by Savas. The Examiner is requested to indicate where Savas discloses the step of performing the method of claim 29 for a plurality of processors of the same type having different azimuthal electric field and plasma density distributions from processor to processor and the exterior winding of each particular processor is turned relative to the remainder of the coil of the particular

USSN 10/647,347  
Docket No.: 2328-050A

processor until tests indicate optimum uniform plasma distribution is achieved in each processor. The combination of references results from hindsight. The Examiner has cast around in an attempt (unsuccessful at that) to find bits and pieces of Applicants' claimed combination. There is no suggestion that the references would be combined by one of ordinary skill in the art.

Applicants traverse the rejection of claim 29 under 35 USC §103(a) as being unpatentable over Lee et al. (U.S. Patent 6,288,493) in view of Tobin et al., as applied to claims 28 and 30 above, and further in view of Savas. Applicants cannot agree with this rejection for the same reasons discussed above concerning Savas. While Lee et al. discloses a plural parallel connected windings, there is no disclosure of turning such windings to achieve a predetermined desired relationship for the plasma density incident on the workpiece.

The Examiner relies on Tobin et al. to disclose that moving the conductors of a coil affects the resulting plasma. The portion of Tobin et al. relied on by the Examiner (Figures 11a-11f) is concerned with moving longitudinally extending conductors that have uniform spacing so that the spacing is non-uniform. Such changes in spacing are stated to vary the field profile. One of ordinary skill in the art would not have modified the circular windings of Lee et al., as a result of the disclosure in Tobin et al. of moving longitudinally extending conductors.

Claim 30 depends on claim 32 and requires turning the exterior winding of each processor relative to another winding of the particular processor in a manner to assist in controlling azimuthal electric field distribution and azimuthal plasma density distribution of the particular processor.

USSN 10/647,347  
Docket No.: 2328-050A

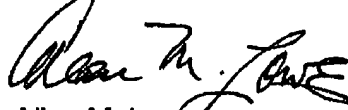
In view of the foregoing amendments and remarks, allowance is in order.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

LOWE HAUPTMAN & BERNER, LLP

  
Allan M. Lowe  
Registration No. 19,641

USPTO Customer No. 22429  
1700 Diagonal Road, Suite 300  
Alexandria, VA 22314  
(703) 684-1111 Telephone  
(703) 518-5499 Facsimile  
AML/alw

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